REMARKS

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the remarks which follow.

Claims are 1, 3, 4, 6-30, 32, 36 and 37 are pending in the instant application.

Claims 1,3,11,13,16, 21, 22, and 26 have been amended and claims 36 and 37 have been added to correct claim informalities and to more distinctly claim the subject matter of the invention. Claims 2 and 5 have been canceled. Applicants reserve the right to file a continuation or a divisional application directed to any subject matter deleted or amended by way of the present Amendment.

The basis for the amendments to the claims and added claims presented herein may be found throughout the specification and claims as-filed, as set forth in the following table.

Claim	Basis
1	page 20, line 22 page 21, line 21
3	deleted claim 2 page 21, line 21
13	page 23, line 15
16	page 24, line 7
21	page 25, line 10
36 (new)	page 21, line 2
37 (new)	page 22, line 27

Double Patenting

3

Claims 1, 2, 3, 6, 8, 20, 21 and 25-27 stand rejected under the judicially created doctrine of obviousness-type patenting as purportedly unpatentable over claims 23 and 25-29 of U.S. Patent No. 6,479,290. The Examiner argues that the conflicting claims are not patentably distinct from each other because the examined claims are either anticipated by, or would have been obvious over the reference claims.

Applicants respectfully request that this rejection be held in abeyance until allowable subject matter has been indicated.

Claim Objections

Claim 22, and by dependency claim 23, stand rejected to under 37 C.F.R. § 1.75(c) as purportedly in improper form because a multiple dependent claim should refer to the claims in the alternative only.

Claim 22 has been amended to depend only on claim 20. Thus, Applicants respectfully submit that this objection has been obviated.

Claim Rejections under 35 U.S.C. § 112

Claims 1, 5, 11-13, 16, 19, 21, 26, 29, 32, and by dependency claims 2-4, 6-10, 14, 15, 17, 18, 20, 22-25, 27, 28, 30 and 33, stand rejected under 35 U.S.C. § 112, second paragraph, as purportedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 1 stands rejected as purportedly vague for the recitation of "the genome of (i) and (ii) comprising". The Office Action questions whether the first and second helper virus "genomes" or the combined "genome" of (i) and (ii) contain the recited characteristics.

Applicants respectfully submit that both the genome of the first helper and the genome of the second helper comprise 5' and 3' ITRs, an encapsidation region, and one or more gene(s) of the early and late viral regions. However, in the interest of expediting prosecution, Applicants have amended claim 1 to add an "s" to the term "genome" in order to recite "the genomes of (i) and (ii) comprising". Thus, this rejection is obviated.

Claims 1 and 21 stand rejected for the recitation of the phrases "deriving from" or "derives from". It is purportedly unclear how closely related the derived sequences are to the original, and further, how the function and structure of the adenovirus relate to the vectors "derived from" said adenovirus.

Applicants have replaced "deriving from" or "derives from" in claims 1 and 21 with "obtained from." Applicants note this language was found acceptable in the parent application (now U.S. Patent No. 6,479,290), and submit that this rejection is obviated.

Claim 1 stands rejected for the recitation of the term "different," as it is purportedly a relative term, which renders the claim indefinite. The Examiner argues that the term "different" is not defined. Applicants herein introduce in claim 1 the features of claim 2 "wherein said first adenovirus is an animal adenovirus and

second adenovirus is a human adenovirus" in order to clarify the claimed subject matter. Accordingly, claim 2 has been deleted and claim 3 is herein amended to refer to claim 1. Thus, applicants submit that this rejection is obviated.

3

Claims 1 and 11 stand rejected as indefinite for the recitation of the term "optionally", because it purportedly is unclear whether the limitations following the term are part of the claimed invention. The subject matter following the word "optionally" in these claims has been removed from claims 1 and 11 and placed into new dependant claims 36 and 37. Thus, this rejection is obviated.

Claim 5 stands rejected as purportedly unclear for reciting that the first and/or second helper adenoviral vector is(are) wild-type adenovirus genome(s). Claim 5 has been canceled by way of this Amendment. Thus, Applicants respectfully submit that this rejection is moot.

Claim 13 is rejected for the recitation of the phrase "the E1 function" in claim

1. There is purportedly insufficient antecedent basis for this phrase in the claim.

Claim 13 is amended herein to specify " the E1 function and wherein the E1 region of the adenoviral vector providing said E1 function," thus providing antecedent basis.

Thus this rejection is obviated.

Claims 12 and 19 stand rejected for the recitation of the term "approximately."

The term "approximately" is purportedly not defined. Applicants submit that this term has been used to encompass equivalents of the recited nucleotide sequences.

For example, in accordance with standard recombinant techniques (such as PCR), it is possible to isolate nucleotide sequences having one or a few nucleotides beyond

the extremities of the recited ones. Thus, those skilled in the art would not read the claims as setting forth an indefinite nucleotide sequence. Thus, this rejection is obviated.

Claim 16 stands rejected for the recitation of the term "equivalent". The term "equivalent" is purportedly not defined. The subject matter including and following "the equivalent" in claim 16 has been replaced herein by a definition of the replaced sequences as follows:

- the penultimate 20bp containing the core origin,
- the penultimate 50bp containing the entire origin of replication, or
- the entire ITRs

of the 5' and 3' ITRs of said second adenoviral helper vector. Thus, this rejection is obviated.

Claim 26 stands rejected for the recitation of the phrase "the Ad5 E1 function" in claim 25. There is purportedly insufficient antecedent basis for this limitation in the claim. The claim has been amended to read as follows: "The method of claim 25, wherein the said second cell line is a complementing cell line for Ad5 E1 function," providing antecedent basis. Thus, this rejection is obviated.

Claims 29 and 32 stand rejected for the recitation of the term" substantially". The term "substantially" is purportedly not defined. Applicants respectfully submit that "substantially" does not appear in claim 29, but rather in claim 30. In effort to expedite prosecution, the following comments concerning claims 30 and 32 are provided. The term "substantially" was introduced in the present claims in order to

be consistent with the limits of the techniques used to detect helper viruses. Indeed,

it can never be ascertained that a high titer viral stock is exempt of all helper viruses

that were used during the production step (i.e., it is impossible to detect one helper

virus in a high titer viral stock). Thus, Applicants submit that this rejection is

obviated.

In view of the aforementioned reasons, and the proposed modifications to the

claims, Applicants respectfully request that the 35 U.S.C. § 112, second paragraph

rejections be withdrawn.

CONCLUSION

In view of the foregoing, further and favorable action in the form of a Notice of

Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this application, it would

be appreciated if the Examiner would telephone the undersigned attorney

By:

concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: <u>July 22, 2003</u>

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